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NATIONAL COMMUNICABLE DISEASE CENTER

Morbidity and Mortality

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WEEKLY REPORT

For Week Ending April 26, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE / HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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EPIDEMIOLOGIC NOTES AND REPORTS

MEASLES IN PREVIOUSLY IMMUNIZED CHILDREN
Governors Island, New York

Between Feb. 1 and April 12, 1969, 73 cases of measles occurred in residents of Governors Island, a Coast Guard installation off the southern tip of New York City; 11 of these cases were in previously immunized children. To date, 32 cases have been confirmed serologically by fourfold or greater increases in hemagglutination inhibition and or complement fixation antibody titers. The remaining 41 cases were clinically and epidemiologically compatible with rubeola and many had a high convalescent antibody titer. Nearly all cases occurred in Caucasian children, reflecting the racial composition of the base population, and 41 cases were in males.

Nearly all patients had a 2 to 3-day prodrome of fever (101 to 105°F.), followed by cough, conjunctivitis, coryza, and a generalized rash of 5 to 7-days duration. Koplick spots were noted in several patients. Six children developed secondary otitis media and three developed pneumonia.

Of the 73 cases, 11 (15 percent) had documented histories of previous measles immunization. Both further attenuated and Edmonston B measles vaccines had been

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	17th WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 17 WEEKS		
	April 26, 1969	April 27, 1968	1964 - 1968	1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis	41	30	30	489	484	478
Brucellosis	5	8	5	37	46	68
Diphtheria	3	17	3	44	65	65
Encephalitis, primary:						
Arthropod-borne & unspecified	23	25	23	332	266	416
Encephalitis, post-infectious	10	13	20	87	157	260
Hepatitis, serum	110	89	791	1,714	1,266	14,085
Hepatitis, infectious	926	911		15,704	14,242	
Malaria	52	23	5	798	726	91
Measles (rubeola)	1,000	887	8,163	10,615	11,312	126,061
Meningococcal infections, total	104	48	65	1,474	1,253	1,253
Civilian	84	40	- - -	1,354	1,130	- - -
Military	20	8	- - -	120	123	- - -
Mumps	2,949	4,251	- - -	41,833	84,749	- - -
Poliomyelitis, total	–	–	–	1	15	7
Paralytic	–	–	–	1	15	6
Rubella (German measles)	3,327	1,965	- - -	23,663	23,353	- - -
Streptococcal sore throat & scarlet fever	9,319	9,081	10,104	193,636	190,509	190,509
Tetanus	2	1	1	34	35	52
Tularemia	3	2	3	30	22	51
Typhoid fever	9	3	4	71	78	103
Typhus, tick-borne (Rky. Mt. spotted fever)	3	2	2	5	8	8
Rabies in animals	91	75	96	1,333	1,287	1,509

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	–	Rabies in man:	–
Botulism: Colo.-6	9	Rubella congenital syndrome:	4
Leptospirosis: Hawaii-1, Ohio-1	14	Trichinosis: N.Y. Ups.-2	28
Plague:	–	Typhus, murine:	5
Psittacosis: Conn.-1, Ohio-1	9		

MEASLES – *(Continued from front page)*

employed. The children had been immunized in Public Health Service clinics, by private physicians, and in mass immunization campaigns held across the country. Although Measles Immune Globulin had been used in some cases, the dosage had rarely been recorded. Two of the 11 children had been immunized prior to 1 year of age. The interval from immunization to onset of illness ranged from 6 months to 5 years. There was no apparent difference in the clinical illness of vaccinated and unvaccinated children.

A measles immunity survey was conducted following the outbreak and data were obtained on 65 percent of the population under 18 years of age. The age distribution of school age children in this sample corresponded well with school enrollment figures. Based on population estimates from this survey, attack rates by age and immunization status were calculated (Table 1): the overall attack rate for measles susceptible children was 33.5 percent, while that for previously immunized children was 2.4 percent. Further studies of the transmission of measles in this highly immune population are currently underway.

(Reported by Charles M. Grace, M.D., Capt., USPHS, Senior Medical Officer, and H. James Wedner, M.D., Lt., USPHS, U.S. Coast Guard Dispensary, Governors Island; Laboratory Division, NCDC; and a team of EIS Officers.)

Editorial Comment:

A number of cases of measles occurring in previously immunized children have now been reported. On Governors Island, 15 percent of the cases had documented histories of vaccination; however, the attack rate in this group was less than 3 percent, demonstrating the need to determine denominator data in evaluating vaccine efficacy.

Table 1
Measles Attack Rates by Age and Immunization Status, Governors Island, New York
Feb. 1-April 12, 1969

Age (Years)	Total Population	No. of Persons with History of Measles, Before January 1969	Immunized*			Unimmunized*		
			Population	No. Cases	Attack Rate	Population	No. Cases	Attack Rate
<1	62	0	1	0	0	61	4	6.6
1-4	306	42	206	5	2.4	58	27	46.6
5-9	378	133	209	6	2.9	36	23	63.9
10-14	203	139	46	0	0	18	5	27.8
15-18	61	45	4	0	0	12	3	25.0
Total	1,010	359	466	11	2.4	185	62	33.5

*With no history of measles before January 1969.

TRANSFUSION MALARIA – New York City

On April 30, 1968, a 19-year-old white man was admitted to a New York City hospital with a temperature of 102°F. and hepatosplenomegaly. He had experienced four attacks of chills and fever in the preceding 12 days. On May 1 he had a spiking temperature to 104°F. Examination of peripheral blood films then revealed the presence of *Plasmodium malariae* parasites. Chloroquine therapy was promptly instituted. On May 3 he became afebrile and remained so thereafter.

The patient had no previous history of unexplained febrile episodes or overseas travel, but was addicted to heroin. Between Feb. 23 and 25, 1968, while in a New York City hospital, he had received three exchange transfusions, consisting of 16 units of whole blood and 26 units of plasma, for treatment of severe hepatitis with pre-coma. By February 29, he had improved and was discharged.

Between May 1968 and April 1, 1969, investigation of the 42 donors was conducted. Of the 16 whole blood donors, only 12 could be contacted: 11 had no history of malaria or travel to malarious areas but the twelfth donor had been born and reared in Honduras; attempts to obtain serum from this donor for malaria serology were unsuccessful. Of the 26 plasma donors, 23 were contacted: one had recently traveled in malarious areas but his serum contained no antibodies to malaria (indirect fluorescent technique). Four plasma donors had been born in Puerto Rico and a fifth donor was a native of Greece; all five had resided in their homeland at a time when *P. malariae* was endemic there; none of the five would consent to serologic screening for malaria.

(Reported by Murray Wittner, M.D., Jacobi Hospital, New York City; Vincent Guinee, M.D., M.P.H., Director, Preventable Diseases, and Howard B. Shookhoff, M.D., Chief, Tropical Disease Division, New York City Health Department.)

Editorial Comment:

The patient may have acquired his infection via blood transfusion or from self-use of contaminated syringes. On rare occasions, malaria may also be transmitted by plasma transfusion, presumably because some red cells are often present in plasma.[1,2]

References:

[1]Duhanina, N. N. and Zukova, T. V.: Transmission of Malaria by Blood Transfusion; An Epidemiological Study in the USSR. Bull WHO *33*:853-56, 1965.

[2]Lozner, E. and New Houser, L. R.: Studies on the Transmissibility of Malaria by Plasma Transfusion. Amer J Med Sci *206*:141-16, 1943.

INTERNATIONAL NOTES

SMALLPOX – West and Central Africa[1]

Through April 16, 1969,* a total of 253 cases of smallpox were reported to the World Health Organization (WHO) by the 19 countries participating in the West and Central African Regional Smallpox Eradication and Measles Control Program. This is a decrease of 88.2 percent from the 2,161 cases recorded during the comparable period in 1968. Figure 1 shows the long term trend of reported smallpox cases in the region since January 1968, in comparison with the mean monthly number of reported cases during the period 1960-1967.

Table 2 shows the weekly reported smallpox cases in the 19 countries during the first 11 weeks of 1969 compared with total cases reported during the comparable 1968 period. In Nigeria, 45 cases occurred during January and February 1969 which were not reported to WHO until the second week in March.

Through March 31 of this year, a total of 74,000,000 smallpox vaccinations have been administered throughout the 19-country area since the West and Central African Regional Smallpox Eradication and Measles Control Program first got underway in January 1967. The estimated population of the area is 119 million persons.

(Reported by the Smallpox Eradication Program, NCDC.)

Reference:

[1]World Health Organization Weekly Epidemiological Record, 44(16):266.

*Data reported were through March 15, 1969.

Figure 1
REPORTED SMALLPOX CASES BY MONTH
1960-67 AVERAGE, 1968 AND 1969
WEST AND CENTRAL AFRICA

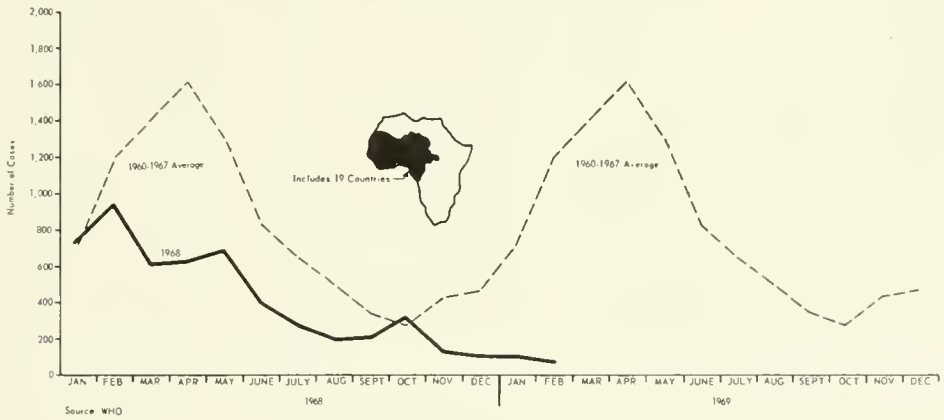

Table 2
Provisional Number of Smallpox Cases by Week – West and Central Africa

Week Ending	January				February				March			Total to Date 1969	Total Same Period 1968
	4	11	18	25	1	8	15	22	1	8	15		
Week Number	1	2	3	4	5	6	7	8	9	10	11		
Country*													
Cameroon	–	–	7	3	1	–	–	–	3	1	–	15	22
Chad	–	–	–	–	–	–	–	–	–	–	–	–	1
Dahomey	–	3	–	–	–	2	–	–	–	–	–	5	183
Ghana	–	1	–	3	2	–	–	–	–	–	–	6	2
Guinea	–	11	–	–	1	–	–	–	–	–	–	12	225
Liberia	–	–	–	–	–	–	–	–	–	–	–	–	5
Mali	–	–	–	–	–	–	1	–	–	–	–	1	27
Niger	–	–	–	2	–	–	4	–	1	13	–	20	290
Nigeria	3	1	5	9	3	10	11	10	9	5	45	111	920
Sierra Leone	13	–	6	1	3	–	19	11	–	2	1	56	249
Togo	11	2	1	2	2	–	2	3	2	1	1	27	221
Upper Volta	–	–	–	–	–	–	–	–	–	–	–	–	26
Total												253	2,161

*No cases reported from Central African Republic, Congo (B), Gabon, Gambia, Ivory Coast, Senegal, and Mauritania.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED
APRIL 26, 1969 AND APRIL 27, 1968 (17th WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post-Infectious	Serum	Infectious			
	1969	1969	1969	1969	1968	1969	1969	1969	1968	1969	Cum. 1969
UNITED STATES...	41	5	3	23	25	10	110	926	911	52	798
NEW ENGLAND.....	1	-	-	2	2	-	6	56	34	1	32
Maine.....	-	-	-	-	-	-	-	3	3	-	-
New Hampshire.....	-	-	-	-	-	-	-	3	1	-	2
Vermont.....	-	-	-	-	-	-	-	2	1	-	-
Massachusetts.....	-	-	-	-	2	-	2	27	19	1	26
Rhode Island.....	-	-	-	1	-	-	-	14	2	-	-
Connecticut.....	1	-	-	1	-	-	4	7	8	-	4
MIDDLE ATLANTIC.....	8	-	-	6	7	-	40	184	138	5	89
New York City.....	-	-	-	3	1	-	33	55	50	-	8
New York, Up-State.	-	-	-	1	1	-	1	26	22	3	17
New Jersey.....	7	-	-	1	2	-	5	54	22	1	30
Pennsylvania.....	1	-	-	1	3	-	1	49	44	1	34
EAST NORTH CENTRAL...	6	-	-	7	1	-	5	168	144	8	71
Ohio.*	2	-	-	3	1	-	-	33	38	-	9
Indiana.....	-	-	-	-	-	-	-	21	6	1	6
Illinois.....	2	-	-	2	-	-	2	47	49	5	32
Michigan.....	2	-	-	2	-	-	3	58	39	2	23
Wisconsin.....	-	-	-	-	-	-	-	9	12	-	1
WEST NORTH CENTRAL...	2	3	-	1	5	-	1	34	80	5	56
Minnesota.....	-	1	-	1	-	-	-	8	22	-	3
Iowa.*	1	2	-	-	-	-	-	9	17	-	5
Missouri.....	1	-	-	-	1	-	1	5	32	2	15
North Dakota.....	-	-	-	-	-	-	-	-	-	-	2
South Dakota.....	-	-	-	-	-	-	-	3	-	-	-
Nebraska.....	-	-	-	-	-	-	-	5	-	-	3
Kansas.....	-	-	-	-	4	-	-	4	9	3	28
SOUTH ATLANTIC.....	3	2	-	1	5	1	5	74	97	11	248
Delaware.....	-	-	-	-	-	-	-	-	1	-	1
Maryland.*	1	-	-	-	2	-	3	14	11	-	5
Dist. of Columbia..	-	-	-	-	-	-	-	1	1	-	1
Virginia.....	1	2	-	-	1	-	-	9	20	2	12
West Virginia.....	-	-	-	-	-	-	-	2	7	-	-
North Carolina.....	1	-	-	1	-	-	-	8	13	7	131
South Carolina.....	-	-	-	-	-	-	-	9	1	1	23
Georgia.....	-	-	-	-	-	-	-	10	11	1	60
Florida.....	-	-	-	-	2	1	2	21	32	-	15
EAST SOUTH CENTRAL...	5	-	-	-	-	-	1	44	41	-	25
Kentucky.....	4	-	-	-	-	-	-	6	14	-	20
Tennessee.....	-	-	-	-	-	-	1	21	15	-	-
Alabama.....	1	-	-	-	-	-	-	9	5	-	5
Mississippi.....	-	-	-	-	-	-	-	8	7	-	-
WEST SOUTH CENTRAL...	1	-	1	1	2	3	4	79	74	1	22
Arkansas.....	-	-	-	-	-	-	-	4	5	-	5
Louisiana.....	1	-	-	1	2	1	4	15	11	1	15
Oklahoma.....	-	-	-	-	-	-	-	12	6	-	2
Texas.....	-	-	1	-	-	2	-	48	52	-	-
MOUNTAIN.....	-	-	1	1	-	-	1	45	48	4	58
Montana.....	-	-	-	-	-	-	-	6	7	-	-
Idaho.....	-	-	-	-	-	-	-	1	1	-	1
Wyoming.....	-	-	-	-	-	-	-	-	2	-	-
Colorado.....	-	-	-	1	-	-	-	12	19	3	52
New Mexico.....	-	-	-	-	-	-	-	5	2	1	3
Arizona.....	-	-	1	-	-	-	1	12	5	-	1
Utah.....	-	-	-	-	-	-	-	9	11	-	1
Nevada.....	-	-	-	-	-	-	-	-	1	-	-
PACIFIC.....	15	-	1	4	3	6	47	242	255	17	197
Washington.....	-	-	1	-	1	-	1	31	24	-	5
Oregon.....	3	-	-	-	-	-	1	12	16	-	5
California.....	11	-	-	4	2	6	45	192	215	17	167
Alaska.....	-	-	-	-	-	-	-	3	-	-	-
Hawaii.....	1	-	-	-	-	-	-	4	-	-	20
Puerto Rico.....	1	-	-	-	-	-	-	29	25	-	1

* Delayed reports: Aseptic meningitis: Ohio 1, Iowa 2
Encephalitis, primary: Iowa 2
Hepatitis, serum: Md. 1(1968)
Malaria: Iowa 1

TABLE III CASES OF SPECIFIED NOTIFIABLE DISEASES, UNITED STATES

FOR WEEKS ENDED

APRIL 26, 1969 AND APRIL 27, 1968 (17th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1969	1969	1968	1969	1969	1968	1969	1969	1969	Cum. 1969	1969
UNITED STATES...	1,000	10,615	11,312	104	1,474	1,253	2,949	-	-	1	3,327
NEW ENGLAND.....	49	538	431	2	39	64	474	-	-	-	266
Maine.*.....	-	2	13	1	3	4	41	-	-	-	29
New Hampshire.....	4	164	58	-	-	6	1	-	-	-	9
Vermont.....	-	2	1	-	-	1	156	-	-	-	2
Massachusetts.*....	12	90	155	-	19	28	138	-	-	-	91
Rhode Island.....	-	9	1	-	4	5	34	-	-	-	12
Connecticut.....	33	271	203	1	13	20	104	-	-	-	123
MIDDLE ATLANTIC.....	408	3,613	1,695	18	201	205	181	-	-	-	132
New York City.....	323	2,548	528	3	40	39	127	-	-	-	67
New York, Up-State.	22	359	792	3	35	36	NN	-	-	-	43
New Jersey.....	25	342	312	9	75	71	54	-	-	-	19
Pennsylvania.....	38	364	63	3	51	59	NN	-	-	-	3
EAST NORTH CENTRAL...	86	1,109	2,481	16	191	132	678	-	-	-	667
Ohio.....	25	141	199	3	68	35	44	-	-	-	84
Indiana.....	27	328	396	3	26	18	138	-	-	-	183
Illinois.....	14	194	1,022	3	33	30	142	-	-	-	139
Michigan.....	4	109	157	4	52	37	119	-	-	-	139
Wisconsin.....	16	337	707	3	12	12	235	-	-	-	122
WEST NORTH CENTRAL...	40	335	251	3	70	62	170	-	-	-	289
Minnesota.....	-	1	7	1	13	15	20	-	-	-	33
Iowa.*.....	29	205	50	-	10	4	105	-	-	-	210
Missouri.....	-	14	64	1	25	18	15	-	-	-	7
North Dakota.....	-	6	91	-	-	2	15	-	-	-	4
South Dakota.....	-	-	4	-	-	4	NN	-	-	-	-
Nebraska.....	9	107	27	-	8	5	4	-	-	-	35
Kansas.....	2	2	8	1	14	14	11	-	-	-	-
SOUTH ATLANTIC.....	129	1,621	966	13	264	273	151	-	-	-	356
Delaware.....	25	158	7	-	4	3	1	-	-	-	4
Maryland.....	1	14	57	4	25	17	18	-	-	-	54
Dist. of Columbia.*	-	-	6	1	6	10	1	-	-	-	27
Virginia.....	65	660	189	1	32	19	25	-	-	-	52
West Virginia.....	5	150	153	-	12	6	62	-	-	-	75
North Carolina.....	10	139	254	3	40	58	NN	-	-	-	-
South Carolina.....	9	81	10	1	40	48	9	-	-	-	18
Georgia.....	-	1	3	2	42	48	-	-	-	-	-
Florida.....	14	418	287	1	63	64	35	-	-	-	126
EAST SOUTH CENTRAL...	7	56	289	3	80	102	137	-	-	-	166
Kentucky.....	6	27	73	2	24	40	57	-	-	-	55
Tennessee.....	-	13	46	1	34	32	80	-	-	-	97
Alabama.....	-	-	49	-	13	14	-	-	-	-	7
Mississippi.....	1	16	121	-	9	16	-	-	-	-	7
WEST SOUTH CENTRAL...	187	2,454	3,036	24	224	238	432	-	-	1	592
Arkansas.....	-	3	-	1	23	14	2	-	-	-	1
Louisiana.*.....	3	72	2	14	63	61	-	-	-	-	-
Oklahoma.....	1	106	101	3	23	45	116	-	-	-	430
Texas.....	185	2,273	2,933	6	115	118	314	-	-	1	161
MOUNTAIN.....	31	268	539	-	31	16	205	-	-	-	91
Montana.....	-	4	55	-	4	2	35	-	-	-	-
Idaho.....	2	38	11	-	5	3	10	-	-	-	2
Wyoming.....	-	-	42	-	-	-	-	-	-	-	-
Colorado.....	5	25	241	-	6	7	15	-	-	-	44
New Mexico.....	12	119	50	-	6	-	44	-	-	-	10
Arizona.....	12	80	119	-	7	1	92	-	-	-	32
Utah.....	-	1	16	-	1	-	9	-	-	-	3
Nevada.....	-	1	5	-	2	3	-	-	-	-	-
PACIFIC.....	63	621	1,624	25	374	161	521	-	-	-	768
Washington.....	4	43	411	-	48	26	219	-	-	-	99
Oregon.....	3	124	330	1	9	14	6	-	-	-	32
California.....	56	436	850	17	299	111	235	-	-	-	545
Alaska.....	-	13	-	6	10	-	51	-	-	-	31
Hawaii.....	-	5	33	1	8	10	10	-	-	-	61
Puerto Rico.....	60	313	236	1	8	16	29	-	-	-	12

* Delayed reports: Measles: Mass. delete 1, Iowa 23, La. 1
Mumps: Me. 2, D.C. 1
Rubella: Me. 4, La. delete 1

TABLE III CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

APRIL 26, 1969 AND APRIL 27, 1968 (17th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES...	9,319	2	34	3	30	9	71	3	5	91	1,333
NEW ENGLAND.....	1,572	-	-	-	-	-	1	-	-	-	4
Maine..*.....	12	-	-	-	-	-	-	-	-	-	3
New Hampshire.....	53	-	-	-	-	-	-	-	-	-	-
Vermont.....	64	-	-	-	-	-	-	-	-	-	1
Massachusetts.....	262	-	-	-	-	-	1	-	-	-	-
Rhode Island.....	111	-	-	-	-	-	-	-	-	-	-
Connecticut.....	1,070	-	-	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	567	-	5	-	1	-	9	-	-	-	36
New York City.....	44	-	3	-	1	-	6	-	-	-	-
New York, Up-State.	486	-	2	-	-	-	1	-	-	-	34
New Jersey.....	NN	-	-	-	-	-	-	-	-	-	-
Pennsylvania.....	37	-	-	-	-	-	2	-	-	-	2
EAST NORTH CENTRAL...	882	-	3	-	2	-	6	-	-	3	72
Ohio.*.....	201	-	-	-	-	-	4	-	-	-	17
Indiana.....	137	-	-	-	1	-	-	-	-	3	20
Illinois.....	148	-	1	-	1	-	-	-	-	-	13
Michigan.....	271	-	2	-	-	-	2	-	-	-	1
Wisconsin.....	125	-	-	-	-	-	-	-	-	-	21
WEST NORTH CENTRAL...	343	-	1	-	4	-	-	-	-	25	250
Minnesota.....	16	-	-	-	-	-	-	-	-	3	57
Iowa.....	76	-	-	-	-	-	-	-	-	1	32
Missouri.....	4	-	-	-	3	-	-	-	-	6	79
North Dakota.....	89	-	-	-	-	-	-	-	-	-	33
South Dakota.....	34	-	-	-	-	-	-	-	-	-	13
Nebraska.....	67	-	-	-	-	-	-	-	-	-	8
Kansas.....	57	-	1	-	1	-	-	-	-	15	28
SOUTH ATLANTIC.....	1,132	-	8	2	13	3	9	-	-	24	395
Delaware.....	5	-	-	-	-	-	-	-	-	-	-
Maryland.....	191	-	-	-	-	-	2	-	-	-	-
Dist. of Columbia.*	3	-	2	-	-	-	-	-	-	-	-
Virginia.....	309	-	-	-	-	-	-	-	-	9	225
West Virginia.....	182	-	1	-	2	-	-	-	-	5	64
North Carolina.....	30	-	1	1	5	2	3	-	-	-	4
South Carolina.....	87	-	1	1	1	-	1	-	-	-	-
Georgia.....	4	-	-	-	1	1	2	-	-	2	29
Florida.....	321	-	3	-	4	-	1	-	-	8	73
EAST SOUTH CENTRAL...	1,310	-	4	1	6	-	8	3	4	11	232
Kentucky.....	118	-	2	-	-	-	-	-	-	6	131
Tennessee.....	998	-	2	-	5	-	7	3	4	4	78
Alabama.....	145	-	-	-	-	-	-	-	-	1	23
Mississippi.....	49	-	-	1	1	-	1	-	-	-	-
WEST SOUTH CENTRAL...	704	2	8	-	2	4	11	-	-	9	173
Arkansas..... ..	9	-	-	-	-	2	6	-	-	2	14
Louisiana.....	6	1	5	-	-	-	-	-	-	-	13
Oklahoma.....	66	-	1	-	2	-	-	-	-	2	28
Texas.....	623	1	2	-	-	2	5	-	-	5	118
MOUNTAIN.....	1,587	-	-	-	2	1	11	-	-	3	48
Montana.....	25	-	-	-	-	-	-	-	-	-	-
Idaho.....	148	-	-	-	-	-	-	-	-	-	-
Wyoming.*.....	300	-	-	-	-	-	5	-	-	1	29
Colorado.....	714	-	-	-	-	1	2	-	-	-	2
New Mexico.....	187	-	-	-	1	-	2	-	-	-	7
Arizona.....	69	-	-	-	-	-	1	-	-	2	7
Utah.....	144	-	-	-	1	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	1	-	-	-	3
PACIFIC.....	1,222	-	5	-	-	1	16	-	1	16	123
Washington.....	379	-	1	-	-	-	1	-	-	-	-
Oregon.....	99	-	-	-	-	-	-	-	-	-	-
California.....	588	-	4	-	-	1	15	-	1	16	123
Alaska.....	65	-	-	-	-	-	-	-	-	-	-
Hawaii.....	91	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	11	-	2	-	-	-	3	-	-	1	8

* Delayed reports: SST: Me. 12, Ohio delete 3, D.C. 1
Rabies in animals: Wyo. 17

Week No. 17

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED APRIL 26, 1969

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
NEW ENGLAND:	670	417	42	22
Boston, Mass.	216	128	11	6
Bridgeport, Conn.	41	29	4	3
Cambridge, Mass.	31	18	7	-
Fall River, Mass.	29	21	-	-
Hartford, Conn.	54	26	1	3
Lowell, Mass.	32	19	4	1
Lynn, Mass.	12	7	1	-
New Bedford, Mass.	27	17	-	2
New Haven, Conn.	53	38	1	1
Providence, R. I.	49	35	2	3
Somerville, Mass.	10	7	1	-
Springfield, Mass.	42	24	4	1
Waterbury, Conn.	22	11	-	2
Worcester, Mass.	52	37	6	-
MIDDLE ATLANTIC:	3,294	1,898	116	159
Albany, N. Y.	51	24	3	7
Allentown, Pa.	30	22	4	-
Buffalo, N. Y.	140	76	-	10
Camden, N. J.	39	23	4	2
Elizabeth, N. J.	26	15	1	-
Erie, Pa.	40	27	1	1
Jersey City, N. J.	63	34	4	5
Newark, N. J.	61	26	3	5
New York City, N. Y.	1,653	974	62	78
Paterson, N. J.	42	25	-	1
Philadelphia, Pa.	507	275	7	26
Pittsburgh, Pa.	219	119	10	15
Reading, Pa.	43	27	1	-
Rochester, N. Y.	116	62	4	6
Schenectady, N. Y.	31	23	4	-
Scranton, Pa.	46	32	2	-
Syracuse, N. Y.	82	46	1	1
Trenton, N. J.	45	21	-	-
Utica, N. Y.	31	22	4	2
Yonkers, N. Y.	29	25	1	-
EAST NORTH CENTRAL:	2,676	1,476	85	131
Akron, Ohio	71	43	-	-
Canton, Ohio	37	22	-	1
Chicago, Ill.	766	419	31	40
Cincinnati, Ohio	182	99	6	6
Cleveland, Ohio	213	105	3	10
Columbus, Ohio	129	68	3	10
Dayton, Ohio	70	34	2	5
Detroit, Mich.	366	199	10	22
Evansville, Ind.	42	26	2	3
Flint, Mich.	71	34	5	7
Fort Wayne, Ind.	45	23	5	4
Gary, Ind.	17	10	-	-
Grand Rapids, Mich.	28	22	4	-
Indianapolis, Ind.	158	85	1	9
Madison, Wis.	47	24	3	2
Milwaukee, Wis.	150	90	1	5
Peoria, Ill.	52	23	2	2
Rockford, Ill.	43	23	2	-
South Bend, Ind.	27	19	-	2
Toledo, Ohio	91	65	4	2
Youngstown, Ohio	71	43	1	1
WEST NORTH CENTRAL:	820	517	40	47
Des Moines, Iowa	74	45	1	7
Duluth, Minn.	30	19	4	2
Kansas City, Kans.	50	27	5	7
Kansas City, Mo.	133	84	6	7
Lincoln, Nebr.	18	14	-	-
Minneapolis, Minn.	97	71	1	6
Omaha, Nebr.	71	45	3	2
St. Louis, Mo.	217	133	10	7
St. Paul, Minn.	59	37	3	4
Wichita, Kans.	71	42	7	5
SOUTH ATLANTIC:	1,287	658	41	54
Atlanta, Ga.	135	59	1	7
Baltimore, Md.	248	124	2	7
Charlotte, N. C.	45	20	2	5
Jacksonville, Fla.	90	44	5	2
Miami, Fla.	127	69	-	5
Norfolk, Va.	69	36	5	4
Richmond, Va.	70	38	6	2
Savannah, Ga.	34	20	5	-
St. Petersburg, Fla.	81	62	4	1
Tampa, Fla.	77	46	7	3
Washington, D. C.	250	115	3	12
Wilmington, Del.	61	25	1	6
EAST SOUTH CENTRAL:	668	332	46	33
Birmingham, Ala.	93	47	3	8
Chattanooga, Tenn.	55	28	7	2
Knoxville, Tenn.	53	38	7	1
Louisville, Ky.	133	65	18	5
Memphis, Tenn.	145	67	3	6
Mobile, Ala.	40	17	2	3
Montgomery, Ala.	34	15	2	3
Nashville, Tenn.	115	55	4	5
WEST SOUTH CENTRAL:	1,178	626	37	54
Austin, Tex.	34	19	6	3
Baton Rouge, La.	58	26	2	3
Corpus Christi, Tex.	31	17	-	-
Dallas, Tex.	148	73	3	11
El Paso, Tex.	60	34	1	9
Fort Worth, Tex.	92	60	3	2
Houston, Tex.	254	115	4	2
Little Rock, Ark.	65	35	2	4
New Orleans, La.	145	78	5	7
Oklahoma City, Okla.	79	42	1	4
San Antonio, Tex.	106	66	2	6
Shreveport, La.	52	29	2	2
Tulsa, Okla.	54	32	6	1
MOUNTAIN:	419	230	12	25
Albuquerque, N. Mex.	51	24	3	4
Colorado Springs, Colo.	29	16	2	1
Denver, Colo.	102	50	3	13
Ogden, Utah	16	12	-	-
Phoenix, Ariz.	101	55	1	5
Pueblo, Colo.	27	15	1	-
Salt Lake City, Utah	41	24	-	1
Tucson, Ariz.	52	34	2	1
PACIFIC:	1,671	1,007	35	66
Berkeley, Calif.	18	14	-	-
Fresno, Calif.	52	31	1	3
Glendale, Calif.	36	25	-	2
Honolulu, Hawaii	38	20	1	1
Long Beach, Calif.	88	51	3	1
Los Angeles, Calif.	531	332	14	25
Oakland, Calif.	95	53	1	5
Pasadena, Calif.	50	37	1	-
Portland, Oreg.	136	85	5	2
Sacramento, Calif.	64	36	1	4
San Diego, Calif.	109	55	2	10
San Francisco, Calif.	167	94	-	4
San Jose, Calif.	47	26	1	1
Seattle, Wash.	160	97	4	7
Spokane, Wash.	36	22	1	-
Tacoma, Wash.	44	29	-	1
Total	12,683	7,161	454	591

Cumulative Totals
including reported corrections for previous weeks

All Causes, All Ages	238,154
All Causes, Age 65 and over	138,172
Pneumonia and Influenza, All Ages	14,186
All Causes, Under 1 Year of Age	10,639

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In the first paragraph of the article "Measles on Oregon-Idaho Border," the third sentence should be corrected to read "The 39 cases in Nyssa were distributed among 15 families, eight of whom were Mexican-American base migrants." The word "base" was unintentionally omitted from the original article. This word is important for it contrasts these families, who are residents of Malheur County, with those "in migrant" families, who migrate into Oregon seasonally.

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ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES AT CLOSE OF BUSINESS ON FRIDAY; COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THE PUBLIC ON THE SUCCEEDING FRIDAY.

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